



# 2.4GHz 11 Mbps Wireless Ethernet Adapter

User Guide

SMC 2670W



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## Compliances

### FCC Class B

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**FCC Caution:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## **IMPORTANT NOTE**

### **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### **Industry Canada - Class B**

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of the Department of Communications.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques," NMB-003 édictée par l'Industrie.

Congratulations on your purchase of the EZ Connect™ 2.4GHz 11 Mbps Wireless Ethernet Adapter. The EZ Connect™ Wireless Ethernet Adapter is the perfect device for connecting any Ethernet enabled device, such as a printer or game console, to your wireless network. Plug and Play installation allows users to set-up this adapter to connect to any existing 802.11b wireless network in minutes. By offering both a windows-based and web-based administration utility, the EZ Connect Wireless Adapter can be managed from any PC on your network. To secure this wireless connection, the EZ Connect Wireless Ethernet Adapter supports 64/128-bit Wired Equivalent Privacy (WEP) encryption. For setup instructions, see section 3.

### **Benefits:**

- IEEE 802.11b compliant ensure seamless interoperability among multiple vendors
- 11 Mbps performance meets most foreseeable networking needs
- Perfect for connecting network-enabled game console systems.
- 64/128-bit WEP ensures secure network connection
- Simple and easy installation by using the convenient web or windows-based configuration utility.

### **Compatibility:**

- IEEE 802.3
- IEEE 802.11b

**The EZ Connect Wireless Ethernet Adapter package includes the following:**

- One EZ Connect™ 2.4GHz 11 Mbps Wireless Ethernet Adapter
- One CD containing EZ Installation Wizard, Utility Software and Complete Documentation
- One Power Adapter
- One CAT 5 Crossover Cable
- One Manual

**Minimum Requirements:**

- An A/C power outlet (100 – 120V, 50 – 60Hz), to supply power to the Wireless Ethernet Adapter.
- An available RJ-45 port on a 10BASE-T Ethernet device.
- 802.11 compliant wireless Ethernet adapters with TCP/IP compatible protocol installed.

# Section 1 | Getting Started

## Site Location

Choose a location for your EZ Connect Wireless Ethernet Adapter. Usually, the best location is at the center of your wireless coverage area, and if possible within line-of-sight of your main wireless broadcast device, such as an Access Point or a Wireless Router.

## Connect the Ethernet Cable

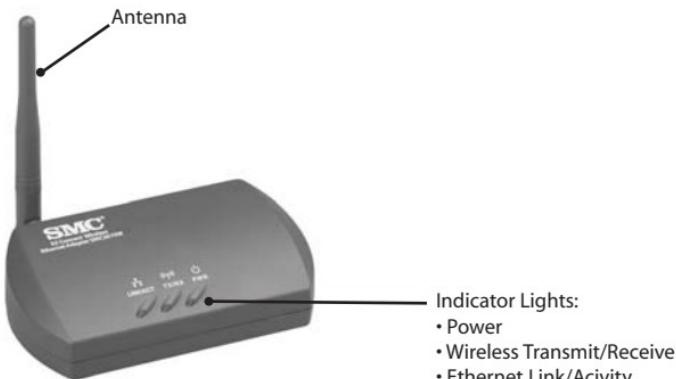
The EZ Connect Wireless Ethernet Adapter can be connected to any device that has a standard Ethernet connection. Use a standard Category 5 UTP Crossover Ethernet cable with an RJ-45 connector to connect the Wireless Ethernet Adapter to any Ethernet-enabled device.

**Note:** Do not connect this adapter directly to the LAN port of a router, such as the Barricade.

## Connect the Power Cable

Connect the power adapter cable to the 5V DC power socket on the rear panel.

**Warning:** Use only the power adapter supplied with the SMC2670W. Using another power adapter will cause damage to the unit and void the warranty.



## 1.1 | Wireless Ethernet Adapter LED Indicators

The preceding diagram shows the location of all ports, jacks, controls, and LED indicator lights on the EZ Connect 11 Mbps Wireless Ethernet Adapter. The Wireless Ethernet Adapter contains 1 external antenna, which is adjustable for best wireless reception.

The front of the Wireless Ethernet Adapter has 3 labeled indicator lights. When you connect your Wireless Ethernet Adapter, these lights will be on, off, or blinking, indicating the following states.

Light	On	Off	Blinking
LNK/ACT	Ethernet Connection	No Ethernet Connection	Data being sent or received over Ethernet
TX/RX	Wireless Connection	No Wireless Connection	Scanning for wireless signal
PWR	Receiving Power	Not Receiving Power	N/A

## **1.2 | Resetting the Wireless Ethernet Adapter**

To reset the SMC2670W Wireless Ethernet Adapter or to correct temporary connectivity problems, follow the steps outlined below:

1. Locate the [Default] button on the back of the EZ Connect Wireless Ethernet Adapter.
2. Unplug the power from the back of the Wireless Ethernet Adapter for 5 seconds.
3. Hold down the [Default] button, located on the back of the device.
4. Plug the power connector into the Wireless Ethernet Adapter while holding down the [Default] button.
5. Release the [Default] button after 3 seconds.
6. Wait another 3 seconds, and then push and hold down the [Default] button again.
7. The "LNK/ACT" and "TX/RX" LED indicators will blink once per second about 10-12 times.
8. When the LED indicators begin flashing rapidly, release the [Default] button.

## **Section 2 | Understanding Wireless Connections**

The EZ Connect Wireless Ethernet Adapter is based on the IEEE 802.11b Wi-Fi standard, which uses radio transmission for network connectivity. These 802.11b radio waves travel in all directions, and can transmit through walls and floors. Wireless transmission operating range and data throughput rate are based on several factors, as described below in the following section.

### **2.1 | Recommendations for Best Wireless Performance**

The following information will help you achieve the best wireless range, coverage, and transmission rate from your wireless devices:

- You should place the Wireless Ethernet Adapter within direct line-of-sight of your wireless network broadcast device (i.e. Barricade Wireless Broadband Router).
- Radio signals can travel farther outside of buildings, and the best performance is when wireless components are in direct line-of-sight to one another.
- Putting wireless components in high places helps avoid obstacles and provides better connectivity.
- Building construction such as metal framing, stucco, and concrete walls and floors will reduce radio signal strength. Try to avoid putting the Wireless Ethernet Adapter next to walls, large solid objects; or next to large metal objects such as computer cases, monitors, and appliances (i.e. microwave ovens).
- Wireless signal range, speed, and strength can be affected by interference from neighboring wireless networks and devices. Electro-magnetic devices that operate in the 2.4GHz frequency range, such as radios, and cordless phones, may also interfere with wireless transmission.

## 2.2 | Adjusting the Antenna

The antenna on the SMC2670W can be adjusted for best radio reception. Start with the antenna pointing straight up, and adjust the antenna if wireless reception is poor. Certain areas, such as directly below the antenna, get relatively poor reception. Pointing the antenna toward another wireless component does not improve reception.

**Important:** Enable wireless security (WEP) to protect your network from unwanted access. For more information, see section 6 for instructions on how to configure WEP on the SMC2670W.

## 2.3 | Wireless Distance Table

The following distance table shows the interaction between wireless coverage area and transmission speed for SMC2670W under typical installation circumstances.

Speed (Mbps)	Outdoor Environment*	Indoor Environment**
11 Mbps	128 m (422 ft)	27 m (90 ft)
5.5 Mbps	152 m (502 ft)	31 m (102 ft)
2 Mbps	167 m (551 ft)	32.5 m (107 ft)
1 Mbps	250 m (825 ft)	33 m (109 ft)

\*Outdoors Environment: A line-of-sight environment with no interference or obstruction between the EZ Connect Wireless Ethernet Adapter and users.

\*\*Indoor Environment: A typical office or home environment with floor to ceiling obstructions between the EZ Connect Wireless Ethernet Adapter and wireless broadcast device, such as an access point or wireless router.

## **2.4 | Understanding Wireless Security (WEP)**

Anyone within range of your wireless network is a potential security risk. Without wireless security options configured on your network, a person outside of your physical location, but within your wireless range may be able to access the network and any data that is being transmitted over it. SMC Networks' wireless devices support the wireless security standard called Wired Equivalent Privacy (WEP) to prevent unauthorized users from accessing your network over a wireless connection. This security feature uses a secure network key, called a WEP key. The WEP key encrypts wireless data so that it is only readable by other computers that have the matching WEP key. The WEP key is stored on each wireless device, so that data can be encrypted and decrypted as it is transmitted over the network.

If you are transferring private information over this wireless connection, it is recommended to enable WEP for your Wireless Ethernet Adapter. For more information about WEP and security, see section 6.

## Section 3 | Setup

Typical uses for the SMC EZ Connect 2.4GHz 11 Mbps Wireless Ethernet Adapter:

- Ethernet-enabled Printer
- PC with Ethernet port
- Set-top box, such as Ethernet-enabled cable TV box
- Point-of-Sale Terminal with Ethernet port
- Stereo Receiver system with Ethernet port
- Game Console System, such as Sony Playstation® 2 or Microsoft Xbox®

The EZ Connect Wireless Ethernet Adapter default configuration is:

SSID:	ANY
Wireless Adapter Name:	SMC
IP Address:	192.168.2.25
Subnet Mask:	255.255.255.0
Gateway:	192.168.2.1

The SMC2670W is a Plug-and-Play device. In most cases, the SMC2670W does not require a configuration to get connected. This seamless installation is because the default SSID configuration of the adapter is "ANY". When the SMC2670W is installed on any one of the ethernet-enabled devices listed above, it will automatically connect to any wireless network within range.

### **3.1 | Verify Equipment and Permissions**

1. At computer that you want to install the EZ Connect Wireless Ethernet Adapter Utility, have the following items available:
  - The EZ Connect Wireless Ethernet Adapter CD-ROM
  - These installation instructions
2. Before you proceed with the Utility setup, verify the following:
  - You have administrator privileges on the computer that you are working on. On computers running Windows 2000 or Windows XP, you must be a member of the Administrator group to install software and change network settings. If you cannot run setup, click Log Off from the Start menu, and then log on with an administrator's account. If you don't have administrator access please contact your system administrator.
  - Disable any Anti-Virus or other software applications that could hinder the installation process.

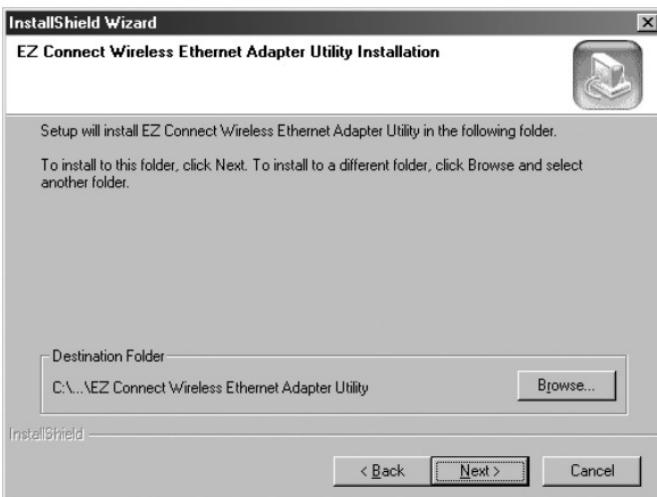
To install the Wireless Ethernet Adapter Utility program, please insert the "SMC2670W Utility and Documentation" CD-ROM into your CD-ROM drive. If the CD does not start automatically after a few seconds, open My Computer, double-click the CD-ROM icon, and then double-click Setup or SMC2670W.exe. The Welcome splash screen should appear.

### 3.2 | Installing the Utility Software

- At the splash screen, click the [Install Utility] option to launch the EZ Installation Wizard.

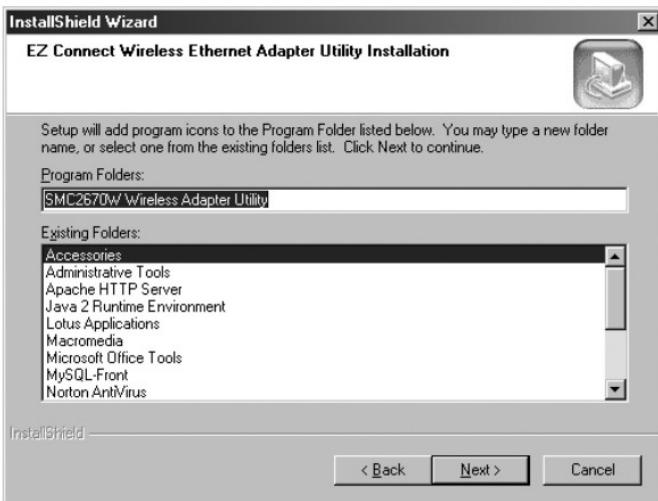


- Configure the install location, and then click the [Next >] button to continue.

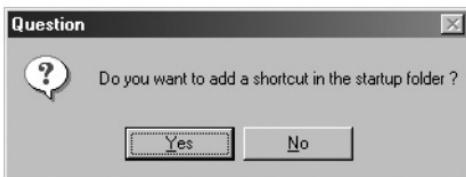


\* It is recommended that you choose the default location.

3. Input the folder name, and then click the [Next >] button to begin the Installation process.



- \* It is recommended that you choose the default folder name.
- 4. Once the files are installed, you will be given the option of adding a shortcut to the utility in your startup folder. If you click [Yes], Windows will automatically run the utility upon boot up. If you click [No], you will need to browse through the Start Menu in order to run the application.



5. Complete the installation process.

## **Section 4 | Accessing the SMC2670W**

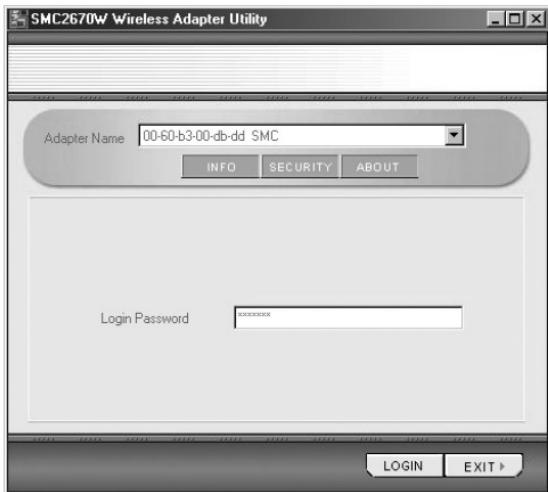
The EZ Connect Wireless Ethernet Adapter can be configured and managed using two different utilities. Each utility provides the same functionality.

- SMC2670W Windows Utility
- SMC2670W Web-based Utility

### **4.1 | Using the Windows Utility**

1. Click [Start], then [Programs], then [SMC2670W Wireless Adapter Utility], then [SMC2670W Wireless Adapter Utility].
2. The Utility will search your network for the EZ Connect Wireless Ethernet Adapter. When the SMC2670W is located, type in the password, and then click the [LOGIN] button.

The factory default password for the SMC2670W is “default”, all lower-case.

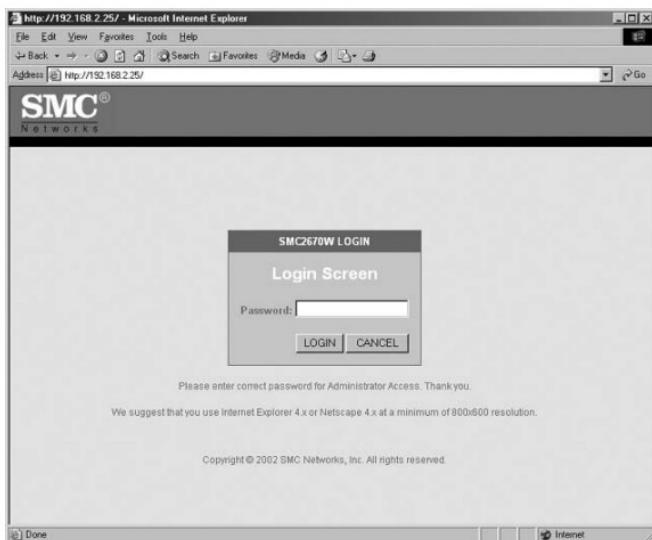


Note: If the utility does not locate your Wireless Ethernet Adapter on the first scan, select the [BROWSE AGAIN] option from the drop down menu.

3. Once you have logged into the Windows Utility, you can:
  - Configure wireless settings and TCP/IP settings
  - Configure Wired Equivalent Privacy (WEP) encryption
  - View device information

## 4.2 | Using the Web-based Utility

1. Launch your web browser. (i.e. Internet Explorer or Netscape)
2. In the Address Bar, type in the IP address that is configured on your Wireless Ethernet Adapter. (Default IP address is: 192.168.2.25)
3. Log into the Web-based Utility. The factory default password for the SMC2670W is “default”, all lower-case.



4. Once logged into the Web-based Utility, you can:

- Configure wireless settings and TCP/IP settings
- Configure Wired Equivalent Privacy (WEP) encryption
- Change administrator password
- View connection status
- View device information

## **Section 5 | Configure**

The EZ Connect Wireless Ethernet Adapter functions as a transparent device on your network by not requiring an IP address that is within the same subnet as your network. The steps outlined below will guide you through the wireless settings and TCP/IP configuration.

Note: If you are using a Barricade Wireless Broadband Router or running a DHCP server with an IP address of 192.168.2.XXX, there should be no configuration required on the SMC2670W.

### **5.1 | Configure the Wireless Ethernet Adapter using Windows-based Utility**

1. Log into the SMC2670W using the Windows-based Utility.  
(see section 4.1 for more information)
2. When you log into the Windows-based Utility, the “INFO” page displays. To change your settings click the [**SETUP >**] button.



From this section, you can configure the following settings:

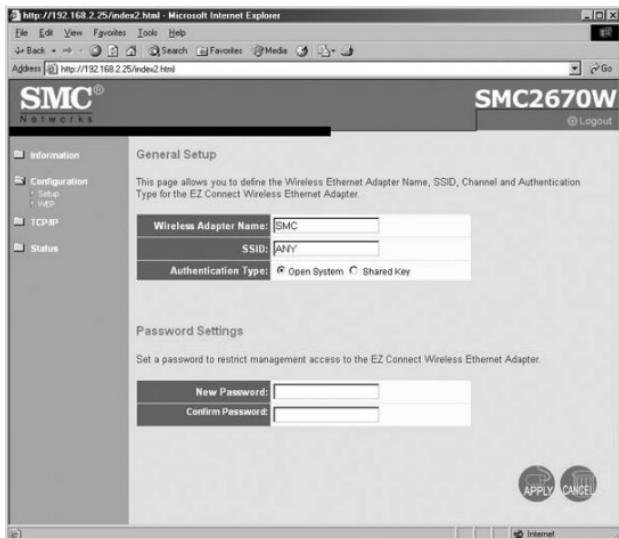
- SSID
- Wireless Ethernet Adapter Name
- Authentication Type
- IP Address
- Subnet Mask
- Gateway
- Password

Note: Since the SMC2670W acts as a transparent device on your network; this configured IP Address is only needed if you want to access the web administration page.

3. Click **[Apply >]** to save your settings and reboot the Wireless Ethernet Adapter.

## 5.2 | Configure the Wireless Ethernet Adapter using Web-based Utility

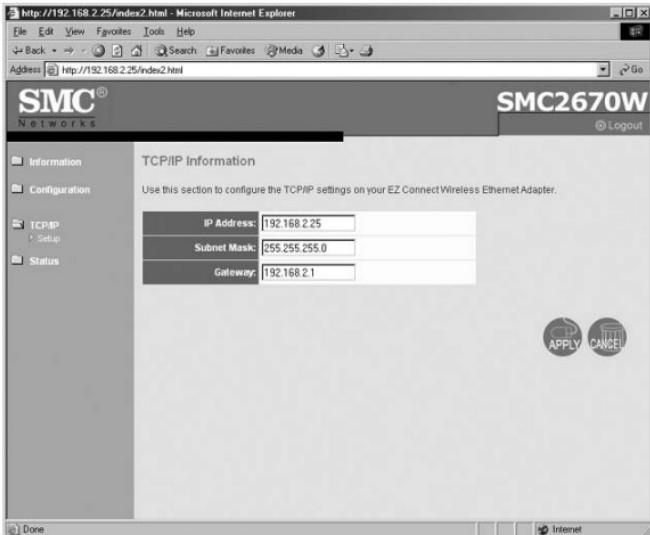
1. Log into the SMC2670W Web-based Utility. (see section 4.2 for more information)
2. Click on [Configuration] section link and then click the [Setup] link.



From this section, you can configure the following settings:

- SSID
- Wireless Ethernet Adapter Name
- Authentication Type
- Password

- When you have completed configuring the wireless settings and/or password, click **[Apply]** to save the settings and reboot the SMC2670W.
- Log back into the EZ Connect Wireless Ethernet Adapter.
- Click on the **[TCP/IP]** section link and then click the **[Setup]** option.



From this section, you can configure the following settings:

- IP Address
- Subnet Mask
- Gateway

Note: Since the SMC2670W acts as a transparent device on your network, the main function of configuring an IP Address on the Wireless Ethernet Adapter is so you can access the web administration page.

- When you have completed the Wireless Ethernet Adapter TCP/IP configuration, click **[Apply]** to save your settings and reboot the SMC2670W.

## Section 6 | Security

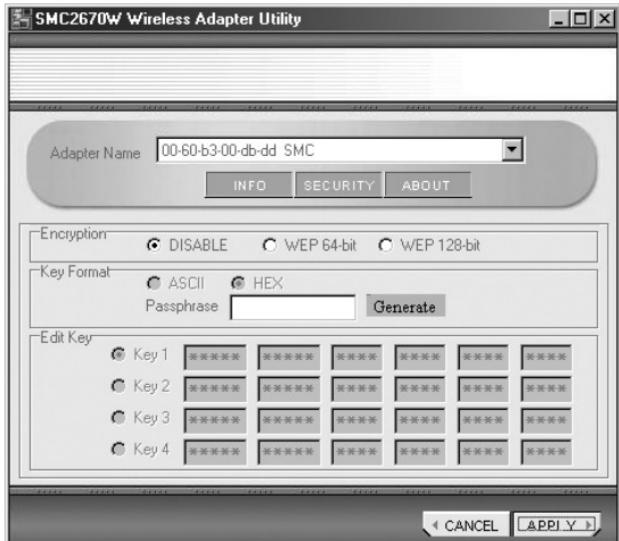
Wired Equivalent Privacy (WEP) is used to protect your data as it is transmitted over the wireless connection. The EZ Connect Wireless Ethernet Adapter supports two levels of encryption, 64-bit and 128-bit, and both HEX and ASCII formats. Please refer to the chart below for the each key and formats requirements.

	64-bit	128-bit	Character Limits
ASCII	5 characters	13 characters	0-9 A-Z
HEX	10 characters	26 characters	0-9 A-F

The EZ Connect Wireless Ethernet Adapter provides a “Passphrase” feature in both the Windows and Web-based Utilities. This feature allows you to take an easy-to-remember term, such as your name, and generate 4 unique WEP keys. This is a convenient feature to use when you are continually changing your WEP keys to provide top-level wireless security.

## 6.1 | Configure WEP using Windows-based Utility

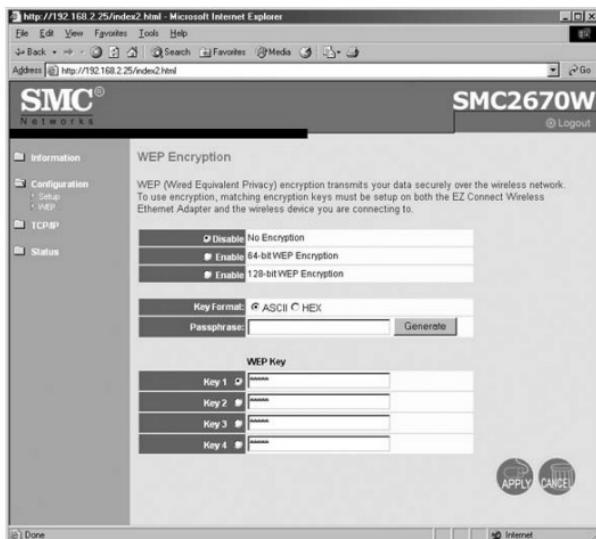
1. Log into the SMC2670W using the Windows-based Utility.  
(see section 4.1 for more information)
2. Click on the [SECURITY] button.
3. Click the [SETUP >] button.



4. Set the security level under the [Encryption] section.
5. Set the WEP key format you want to use under the [Key format] section. (See Section 6 for information on WEP Key structures)
6. Depending on the Encryption Level and Key Format, set the WEP Key under the [Edit key] section and select the key you want to use.

## 6.2 | Configure WEP using Web-based Utility

1. Log into the SMC2670W Web-based Utility. (see section 4.2 for more information)
2. Click on [Configuration] link on the left hand navigation menu.
3. Click [WEP] link



4. Set the security level.
5. Set the WEP key format you want to use.
6. Depending on the Encryption Level and Key Format, set the WEP Key and then select the key you want to use.
7. Click the [Apply] button to save your settings and reboot the SMC2670W.

## **Section 7 | Wireless Ethernet Adapter Information**

Both the Windows Utility and Web-based Utility provide information about the EZ Connect Wireless Ethernet Adapter. The information below outlines the information, which can be found in both utilities:

### **Windows Utility:**

#### **About**

- MAC Address
- Firmware Version
- Utility Version

### **Web Utility:**

#### **Information | General**

- MAC Address
- Firmware Version

#### **Status | General**

- Link Status – Scanning or Connected.
- Connection Information – displays the SSID of the device the SMC2670W is connected to.
- Associated MAC Address – displays the MAC Address of the device the SMC2670W is connected to.
- Channel
- IP Packets Sent
- IP Packets Received

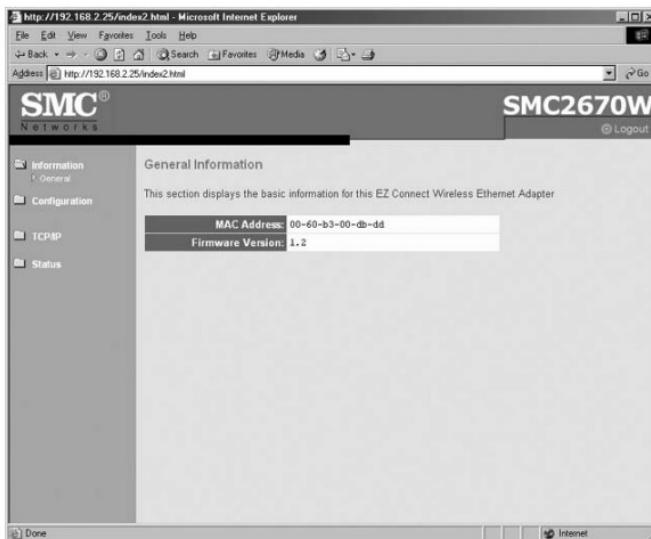
## 7.1 | View Wireless Ethernet Adapter information using Windows-based Utility

1. Log into the SMC2670W using the Windows-based Utility.  
(see section 4.1 for more information)
2. On the status page, click on the [ABOUT] button.



## 7.2 |View Wireless Ethernet Adapter information using Web-based Utility

1. Log into the SMC2670W using the Web-based Utility. (see section 4.2 for more information)
2. The default login page displays:
  - MAC Address
  - Firmware Version



3. To view the other information, click on the [Status] link, then click the [General] option.

The screenshot shows a Microsoft Internet Explorer window displaying the configuration interface for an SMC2670W router. The title bar reads "http://192.168.2.25/index2.html - Microsoft Internet Explorer". The main content area is titled "Status". On the left, there is a navigation menu with the following items:

- Information
- Configuration
- TCP/IP
- Status
  - General

The "Status" section contains the following status information:

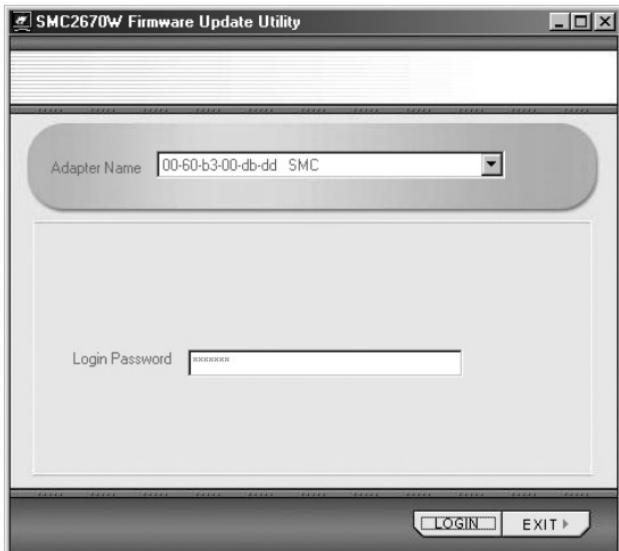
Link Status:	Connected
Connected to:	default
Associated MAC Address:	00-04-e2-48-86-4b
Channel:	1
Packets Sent:	28867
Packets Received:	41744

At the bottom of the status section, there is a "Done" button. The top right corner of the window displays the router's model name, "SMC2670W".

## Section 8 | Upgrading the SMC2670W

The EZ Connect Wireless Ethernet Adapter has a specially designed Windows Utility to upgrade firmware. Before you attempt this process, please verify that you have the latest firmware available from <http://www.smc.com>.

1. Click [Start], then [Programs], choose [SMC2670W Wireless Adapter Utility], and then select [SMC2670W Firmware Update Utility].
2. Scan and log into the SMC2670W on your network.



3. Click the [OPEN FILE] button and browse to the location on your computer where you have the latest SMC2670W (.bin) firmware saved.

- When you have the correct installation path, click the [UPGRADE] button to begin the upgrade process.



**Warning:** Do not turn the power off during the upgrade process. This will damage the unit.

- When the upgrade process has completed, verify the new version by logging into either the Windows or Web Utility.

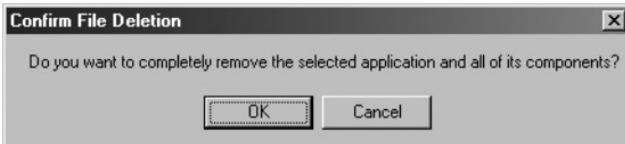
## Section 9 | Uninstalling the SMC2670W Windows Utility

If you need to uninstall the EZ Connect Wireless Ethernet Adapter Utility, please follow the steps below:

1. Click [Start], then [Programs], choose [SMC2670 Wireless Adapter Utility], and then select [Uninstall SMC2670W Wireless Adapter Utility].



2. The Uninstall Wizard will launch.
3. To complete the uninstall process, when prompted by the [Confirm File Deletion] dialog box, click [OK] to continue.



4. The uninstall process will begin and complete.

## Section 10 | Technical Specifications

<b>Standards</b>	<b>RF Power Output</b>
• IEEE802.11b	• 20 dBm (typical)
• IEEE802.3 (10BaseTX)	
<b>Management</b>	<b>Data Rate</b>
• Windows-Based	• 11 Mbps
• Web-Based	• 5.5 Mbps
<b>Security</b>	• 2 Mbps
• 64-bit/128-bit WEP encryption	• 1 Mbps
<b>LAN</b>	<b>Operating Range</b>
• 1 *10BaseT RJ-45 LAN port	• Up to 825 ft
<b>LED</b>	<b>Sensitivity</b>
• Power	• -75 dBm @11Mbps, PER<8%
• Wireless	
• Ethernet	<b>Power Consumption</b>
<b>Antenna</b>	• Transmission: 800mA
• External Dipole Antenna	• Receiving: 350mA
<b>Power Supply</b>	<b>Network Configuration</b>
• DC 5V	• Infrastructure
<b>Operating Frequency</b>	<b>Dimension</b>
• America/FCC: 2.412~2.462 GHz (11 channels)	• 117mm x 62mm x 22mm
• Europe CE/ETSI: 2.412~2.472 GHz (13 channels)	<b>Weight</b>
• Japan: 2.412~2.484 GHz (14 channels)	• <75g
• France: 2.457~2.472 GHz (4 channels)	<b>Operating Temperature</b>
• Spain: 2.457~2.462 GHz (2 channels)	• -10~55°C
	<b>Storage Temperature</b>
	• -20~70°C
	<b>Humidity (non-condensing)</b>
	• 5~80%
	<b>Warranty</b>
	• Limited Lifetime

## **Section 11 | Troubleshooting**

This section provides possible solutions to issues regarding the installation and operation of your EZ Connect Wireless Ethernet Adapter. If the solution you are looking for is not listed here, please visit SMC Networks web site at [www.smc.com](http://www.smc.com).

Before you begin troubleshooting your EZ Connect Wireless Ethernet Adapter, please make sure you are running the latest firmware. You can download this firmware from [www.smc.com](http://www.smc.com).

### **1. I can't connect to the Wireless Ethernet Adapter to my Wireless Broadband Router or Access Point.**

Verify the wireless connection light status on the SMC2670W.

- If the “wireless” light is flashing, the adapter is searching for a wireless device to connect to.
- If the “wireless” light is solid, the adapter is connected to a wireless device within range.
- If the “wireless” light is off, verify the device is plugged into a working electrical outlet. If it is, then please contact the SMC Technical Support Team.

Open the Web-Based Utility. Click on the **[Configuration]** link.

Click on **[Setup]** link, and verify the following:

- SSID is set to the device you are trying to connect to. The default SSID setting on the SMC2670W is “ANY”. By using “ANY” as the SSID, the SMC2670W will connect to any available wireless device in range.
- If you know the SSID of your wireless network, configure this SSID on the SMC2670W.

Click on **[WEP]** link, and verify the following:

- If you have WEP configured on your wireless network, then please configure the SMC2670W with the same WEP Key.
- If you are not using WEP on your wireless network, then please verify if the WEP option is disabled.

If you are still unable to get a wireless connection after verifying the settings listed above, then try to move the Wireless Ethernet Adapter closer to your Wireless Broadband Router/Access Point.

If the SMC2670W connects when you move it closer to the Wireless Broadband Router/Access Point then you configuration is correct. Re-position your Wireless Broadband Router/Access Point and/or the SMC2670W to improve the wireless coverage area.

If you still experience a connection issue after the steps outlined above, please contact the SMC Technical Support Team at 1-800-SMC-4-YOU for more information.

## **2. I don't know how to change the SMC2670W's IP address.**

There are two ways to change the IP configuration of the SMC2670W.

*Using the Web-Based Utility:*

- a) Log into the Web-Based Utility (default IP address is: 192.168.2.25)
- b) Click on the [TCP/IP] section link, and then click on the [Setup] link.
- c) From this section, you can change the following:
  - IP address
  - Subnet Mask
  - Gateway

When you have completed your changes, click the [Apply] button to save the new settings. To apply these new changes, you will need to reboot the SMC2670W. When prompted, click the [OK] button.

*Using the Windows-based Utility:*

- a) Launch the SMC2670W Wireless Adapter Utility
- b) Log into the SMC2670W
- c) Click on the [Setup >] button to access the configuration section. From this section you can configure:
  - IP Address
  - Subnet Mask
  - Gateway

If you encounter problems, power the SMC2670W off and on again, or Reset the unit. Then log back into the web-based or windows-based utility and try to change the IP configuration again.

**3. My PC won't communicate with a PC or printer connected to the EZ Connect Wireless Ethernet Adapter.**

Perform the following steps:

- a) Verify if the PC or printer connected to the Wireless Ethernet Adapter is on the same wireless network by checking the IP configuration.
- b) Verify if the SSID and operating mode are the same for all devices connected to the same wireless network.
- c) If the wireless LAN settings are correct, verify all the devices are on the same IP network.

Check the Ethernet crossover cable and make sure it is properly connected and that the LAN LED is lit. If the LED is not lit, confirm you are using a crossover ethernet cable.

**4. The Web-Based Utility won't open.**

Make sure that you have a network adapter installed on the PC so you can use the Web-Based Utility. Verify if you can ping the SMC2670W at 192.168.2.25.

## **5. The Web-Based Utility does not recognize my password.**

If you forget your password, you can push the [Reset] button on the back of the SMC2670W. This will reset the password to the default setting along with all of the other settings. The default password for the SMC2670W is "default". See section 1.2 for Reset instructions.

## **Section 12 | Glossary**

**802.11** - 802.11 refers to a family of specifications developed by the IEEE for wireless LAN technology. 802.11 specifies an over-the-air interface between a wireless client and a base station or between two wireless clients. The IEEE accepted the specification in 1997.

**802.11b** - An extension to 802.11 that applies to wireless LANS and provides 11 Mbps transmission (with a fallback to 5.5, 2 and 1 Mbps) in the 2.4 GHz band. 802.11b uses only DSSS.

**DHCP (Dynamic Host Configuration Protocol)** - A protocol for assigning dynamic IP addresses to devices on a network. With dynamic addressing, a device can have a different IP address every time it connects to the network. In some systems, the device's IP address can even change while it is still connected. DHCP also supports a mix of static and dynamic IP addresses.

**DNS (Domain Name System)** - Is the system that is used to translate Internet domain names into Internet Protocol (IP) addresses. A domain name is a meaningful and easy-to-remember "handle" for an Internet address.

**DSSS (Direct-Sequence Spread Spectrum)** - Is a transmission technology used in wireless transmissions where a data signal at the sending station is combined with a higher data rate bit sequence, or chipping code, that divides the user data according to a spreading ratio. The chipping code is a redundant bit pattern for each bit that is transmitted, which increases the signal's resistance to interference. If one or more bits in the pattern are damaged during transmission, the original data can be recovered due to the redundancy of the transmission.

**Dynamic IP Address** - An IP address that is automatically assigned to a client station in a TCP/IP network, typically by a DHCP server. Network devices that serve multiple users, such as servers and printers, are usually assigned static IP addresses.

**FHSS (Frequency-Hopping Spread Spectrum)** - Is transmission technology used in wireless transmissions where the data signal is modulated with a narrowband carrier signal that "hops" in a random but predictable sequence from frequency to frequency as a function of time over a wide band of frequencies. The signal energy is spread in time domain rather than chopping each bit into small pieces in the frequency domain. This technique reduces interference because a signal from a narrowband system will only affect the spread spectrum signal if both are transmitting at the same frequency at the same time. If synchronized properly, a single logical channel is maintained.

**Firmware** - Code that is written onto read-only memory (ROM) or programmable read-only memory (PROM). Once firmware has been written onto the ROM or PROM, it is still new settings remain even when the device is turned off.

**IEEE** - The Institute of Electrical and Electronics Engineers, pronounced I-triple-E, is an organization that develops standards that often become national and international standards.

**IP Address** - An identifier for a computer or device on a TCP/IP network. Networks using the TCP/IP protocol route messages based on the IP address of the destination. The format of an IP address is a 32-bit numeric address written as four numbers separated by periods. Each number can be zero to 255. For example, 192.168.2.25 is a valid an IP address.

**IPCONFIG** - A utility that provides for querying, defining and managing IP addresses within a network. This utility is usually run from the DOS prompt and is the perfect tool for troubleshooting connection issues.

**LAN** - A local area network (LAN) is a group of computers and associated devices that share a common communications line and typically share the resources of a single processor or server

within a small geographic area (for example, within an office building).

**MAC Address** - Short for Media Access Control address, a hardware address that uniquely identifies each node of a network. In IEEE 802 networks, the Data Link Control (DLC) layer of the OSI Reference Model is divided into two sublayers: the Logical Link Control (LLC) layer and the Media Access Control (MAC) layer. The MAC layer interfaces directly with the network media. Consequently, each different type of network media requires a different MAC layer.

**Ping (Packet INternet Groper)** - A utility to determine whether a specific IP address is accessible. It works by sending a packet to the specified address and waiting for a reply. PING is used primarily to troubleshoot Internet connections.

**RJ-45** - Short for Registered Jack-45, an eight-wire connector used commonly to connect computers into local-area networks (LAN), especially Ethernets. RJ-45 connectors look similar to the RJ-11 connectors used for connecting telephone equipment, only wider.

**Roaming** – Is the ability to move from one AP coverage area to another without interruption in service or loss in connectivity.

**Static IP Address** - A permanent IP address that is assigned to a node in a TCP/IP network.

**Subnet Mask** - The method used for splitting IP networks into a series of subgroups, or subnets. The mask is a binary pattern that is matched up with the IP address to turn part of the host ID address field into a field for subnets.

**TCP (Transmission Control Protocol)** - TCP is one of the main protocols in TCP/IP networks. Whereas the IP protocol deals only with packets, TCP enables two hosts to establish a connection and exchange streams of data.

**TCP/IP (Transmission Control Protocol/Internet Protocol) -**

TCP is one of the main protocols in TCP/IP networks. Whereas the IP protocol deals only with packets, TCP enables two hosts to establish a connection and exchange streams of data.

**UDP (User Datagram Protocol) -** UDP is a connectionless protocol that, like TCP, runs on top of IP networks. Unlike TCP/IP, UDP/IP provides very few error recovery services, offering instead a direct way to send and receive datagrams over an IP network.**WEP (Wired Equivalent Privacy) -** Is a security protocol for wireless local area networks (WLANs) defined in the 802.11b standard.**WINIPCFG** - Configuration utility based on the Win32 API for querying, defining, and managing IP addresses within a network. A commonly used utility, under Windows 95, 98, and Me, for configuring networks.**WLAN** - Acronym for wireless local-area network. A type of local-area network that uses high-frequency radio waves rather than wires to communicate between nodes.



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## *LIMITED WARRANTY*

### **Full Installation Manual**

Full installation manuals are provided on the Installation CD-Rom. Manuals in other languages than those included on the CD-Rom are provided on [www.smc-europe.com](http://www.smc-europe.com) (section support).

### **Firmware and Drivers**

For latest driver, technical information and bug-fixes please visit [www.smc-europe.com](http://www.smc-europe.com) (section support).

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